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MPsrch\_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Sat May 13 10:58:23 2000; MasPar time 3.90 Seconds 242.977 Million cell updates/sec

Tabular output not generated.

Title:

Description: Perfect Score: Sequence:

>US-09-331-631-8 (80-119) from US09331631.pep (3 of 4) 320 1 PEDPQRRYEECQQECROQEERQOPQCQQRCLKRFEQEQQQ 40

Scoring table: РАМ 150 Gap 11

Searched: 188963 seqs, 23686106 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

Database: a-geneseq35 1:geneseqp

Statistics: Mean 22.611; Variance 93.076; scale 0.243

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

1 3 3 3 4 4 4 4 3 7 7 8 8 8 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Result
320 1158 158 158 153 152 152 152 96 87 87 88 87 88 88 88 88 88 88 88 88 88	Score
100 0 50 3 49 4 47 8 47 5 30 0 20 2 27 2 27 2 27 2 27 2 27 2 27 2 2	Query Match
590 600 600 600 600 600 600 600 600 600 6	Length I
	DB.
W62839 W62828 W62830 W62831 R20181 R20181 R20181 W62841 W95073 W95075 W95075 W95076 R27284 R27284 R27284 R83215 R841875 R8421875 R8421875 R8421875	ID
Gossypium hirsutum ant Wacadamia integrifolia Macadamia integrifolia Macadamia integrifolia Theobroma cacao antimi Sequence encoded by 67 Epitope tagged TBP pro Baker's yeast negative Stenocarpus sinuatus a GST-HD fusion protein ST-HD fusion protein ST-HD fusion protein GST-HD fusion protein ST-HD fusion protein ST-HD fusion protein GST-HD fusion protein ST-HD fusion protein ST-	Description
2.09e-27 6.05e-07 1.16e-06 4.19e-06 4.19e-06 4.19e-06 1.52e-00 2.72e-00 2.72e-00 2.72e-00 2.72e-00 2.72e-00 3.30e-00 3.30e-00 5.88e-00 7.12e-00 7.12e-00 8.62e-00 8.62e-00	Pred. No.

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23.8	23.8	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.4	24.4	24.4	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	24.7	25.0
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W89189	W88413	W37153	W37152	W37151	W22150	W22149	W62834	W37148	R92479	W99597	R33745	W62837	W62647	W04174	R64197	W26658	R70977	W92523	W92524	W31759	K00034
Alternatively spliced,	Acute myeloid leukaemi	Mouse neural Mena+++ p	Mouse neural Mena++ pr	Mouse neural Mena+ pro	Peanut allergen Ara hI	Peanut allergen Ara hI	Arachis hypogaea antim	Mammalian Ena (Mena).	Peroxisome proliferato	Mouse peroxisome proli	XR4	Hordeum vulgare antimi	Mature durum wheat glu	Human receptor H4-1BB.	Human 4-1BB polypeptid	Human 4-1BB receptor.	H4-1BB receptor protei	Human h4-1BBSV recepto	Human h4-1BBSV recepto	A novel human h4-1BBSV	prioritaria immirts pa
2.22e+01	2.22e+01	1.84e+01	1.84e+01	1.84e+01	1.84e+01	1.84e+01	1.84e+01	1.84e+01	1.52e+01	1.52e+01	1.52e+01	1.25e+03	1.26e+01	1.26e+01	1.26e+01	1.26e+01	1.26e+01	1.26e+01	1.26e+01	1.26e+01	1.04e+01

## ALIGNMENTS

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6282 6282 7-0C acad acad ey epti epti coy 2-JU 2-JU	Query Match 100.0%; Score 320; DB 1; Length 590; Best Local Similarity 100.0%; Pred. No. 2.09e-22; Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  80 PEDPQRRYEECQQECRQQEERQQPQCQQRCLKRFEQEQQQ 119  80 PEDPQRRYEECQQECRQQEERQQPQCQQRCLKRFEQEQQQ 119	W62832 standard; Protein; 590 AA. W62832; 27-OCT-1998 (first entry) Gossypium hirsutum antimicrobial protein. antimicrobial protein; infestation; control. Gossypium hirsutum. W09827805-AL. 02-JUL-1998. 02-JUL-1998. 02-DEC-1996; AU-004275. (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY. Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP; WPI; 98-377279/32. Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals Claim 1; Page 49-51; 96pp; English. The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals. Sequence 590 AA;

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Bower NI, Goulter K
WPI; 98-377279/32.
N-PSDB; V42311.
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22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
Bower NI, Goulter KC, Green JL, Manners JM, Mar
WPI; 98-377279/32.
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The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mar
                                                                                                                               Protein
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Macadamia integrifolia antimicrobial protein.
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Claim 1; Page 39-41; 96pp; English.
The sequence is that of an antimicrobial protein whi
be used to control microbial infestations in plants
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Pred. No. 1.16e-06;
9; Mismatches 9;
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Best Local S
Matches 1
                                                                                                                                                                            26-DEC-1991.
07-JUN-1991; G00914.
11-JUN-1990; GB-013016.
(MRSC) MARS UK LTD.
Spencer ME, Hodge R, Deakin E!
WPI: 92-024418/03.
expression vectors
Claim 4; Fig 2; 59pp;
The inventors claim a
                                                                                                                                                                                                                                                                                                                                                                                                  Theobroma cacao.
                                                                                                                                                                                                                                                                                                                                                                                                                                     16-APR-1992 (first entry)
Sequence encoded by 67 kD T. Cocoa; flavour; vicilin; seed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bower NI, Goulter KC, Green JL, Ma
WRI; 98-377279/32.
Novel anti-microbial protein from
useful for controlling microbial i
Claim 1; Page 47-49; 96pp; English
The sequence is that of an antimic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel anti-microbial protein from e.g. Macadamia int useful for controlling microbial infestations of pla Claim 1; Page 43-45; 96pp; English.

The sequence is that of an antimicrobial protein which the sequence is that of an antimicrobial infestations in plants
                                                                                            beans and produced
                                                                                                                         Recombinant cocoa proteins
                                                                                                                                                      N-PSDB; Q20377
                                                                                                                                                                                                                                                                                                                                                                               WO9119801-A.
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22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Theobroma cacao. WO9827805-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Theobroma
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(RETR.) COOP RES CENT TROPICAL PLANT PATHOLOGY.
BOWER NI, Goulter KC, Green JL, Manners JM, Marcus
WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R20181 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be used to control microbial infestations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-OCT-1998
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|DPQRRYEECQQEC-RQQ-EERQQPQCQQRCLKRFEQEQQQ
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18; Conservative
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Similarity 48.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cacao antimicrobial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein;
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                                                                                            'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
English.
67 kD and
                                                                                      teins - are responsible large quantities using
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 152; I
Pred. No. 4.:
13; Mismatcl
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Pred. No. 3.:
10; Mismatcl
                                                                                                                                                                                                                      EA, Ashton
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                                                                                                                                                                                                                                                                                                                                                                                                                                     storage protein.
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Τ.
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4.19e-06;
7;
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                                                                                      flavour in cocosts and bacterial
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plants or man
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transgenic animal expressing epitope-tagged TATA-box binding protein

Pr for isolating higher-order transcription complexes and specific

Pr factors that associate with the protein, useful as potential

therapeutic agents

Pr therapeutic agents

Pr therapeutic agents

Pr therapeutic agents

Pr this sequence represents an epitope-tagged TATA-box binding protein (TBP)

Cr that is expressed by the transgenic non-human animals of the invention.

Cr the animals are used to produce TBP. TBP is used to isolate and

Cr characterise higher-order transcription complexes (from different tissue

and cell types, optionally at different developmental stages). It is also

Cr used to identify new and/or specific TBP associated factors (TAFs,

Cr egulating gene expression, e.g. disease-related genes, so are potential

Cr pharmaceuticals, also for identifying human analogues for use in drug

Cr transcription factors are used for affinity purification of TBP and
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 1
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Best Local S
Matches 1
                  21-MAY-1997 (first entry)
Baker's yeast negative regulator of phospholipid biosynthesis.
Negative regulator of phospholipid biosynthesis; Opil protein;
leucine zipper; polyglutamine tract; inositol-1-phosphate.
Saccharomyces cerevisiae.
                                                                                                                                                                             W14909 standard; Protein; 404 W14909;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Epitope tagged TBP protein.
TATA-box binding protein; epitope-tagged TBP; transcription complex; TAF;
TBP associated factor; TAF-interaction factor; gene expression regulator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W73369;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          its complexes. TBP can isolate transcription complexes from a wide variety of different tissues and cells (contrast known methods that limited to isolation from a particular cell type). Sequence 371 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Berglund E, Kirschbaum B, Meisterernst M, Polites WPI; 99-001394/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-DEC-1998.
26-MAY-1998; 109516.
26-MAY-1997; EP-108433.
(FARH ) HOECHST AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
EP-881288-A1.
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ence 566 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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Similarity 45.0%;
18; Conservative
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Conservative
Location/Qualifiers
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Pred. No.
13; Misma
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Pred. No. 4.19e-06;
13; Mismatches 7;
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Matches 1
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Best Local 9
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22-DEC-1997;
20-DEC-1996;
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04-FEB-1997.
14-JAN-1991;
14-JAN-1991;
02-DEC-1993;
30-MAY-1995;
                                                                                                                                                                           Novel anti-microbial protein from e.g. Macadamia integrifolia useful for controlling microbial infestations of plants or man Claim 1; Page 66; 96pp; Egglish.
The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammal
                                                                                                                                                                                                                                                                                           (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY. Bower NI, Goulter KC, Green JL, Manners JM, Mar WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stenocarpus sinuatus antimicrobial protein. antimicrobial protein; infestation; control Stenocarpus sinuatus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the OPII gene encoding the present sequence have been deleted is claimed. The OPII gene encodes a negative regulator of phospholipid biosynthesis and the genetically engineered yeast cell is useful for enhanced production of inositol, inositol-containing metabolites or phospholipids, including myo-inositol and inositol-1-phosphate, for human or animal consumption.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W62841;
27-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W62841 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Fig 8; 28pp; English.
A genetically engineered Saccharomyces yeast cell in which all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Henry SA, White M WPI; 97-118296/11.
                                                                                                                                Sequence
                                                                                                                                                           aņimals
                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9827805-A1.
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US-165182.
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146
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153
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/note= "part of leucine zipper"
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/note= "part of leucine zipper"
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"part of leucine zip
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Pred.
14; M
                                                              Score 87; I
Pred. No. 2.
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                                             Mismatches
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                                             DB 1,
2.72e+00;
                                                                                                                                                                                                                                                                                                                   JM, Marcus JP;
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    lacking OPI1

                                             Indels
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Misc\_difference

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a composition comprising a fusion protein of (i) (c) (poly)peptide that increases solubility and/or prevents aggregation of fusion protein, and (ii) amyloidogenic (poly)peptide that can self-cassemble into amyloid-like fibrils or protein aggregates. Host cells transformed with a vector containing the nucleic acid encoding the fusion protein are used for the recombinant expression of the fusion protein. The composition is used to detect onset and progression of diseases cassociated with fibrils/protein aggregates. It is potentially useful for treatment of such diseases (e.g. Alzhehmer's disease, scrapie or CAG-crepeat expansion conditions such as Huntington's disease (HD), spinal and bulbar muscular atrophy, dentatorubral pallidolysian atrophy, spinal and confidence of the amyloidogenic polypeptide from fusion protein have a precise starting time for aggregate formation, allowing kinetic measurements, and use of an enzyme for cleavage allows testing under physiological conditions. Sequences W95077-80 represent GST-HD fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
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                                                                                             20. MAY-1999 (first entry)
20. MAY-1999 (first e
                                                                                                                                                                                                                                                                                                          W95073;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     proteins.
Sequence
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31-JUL-1998; E04811.
31-JUL-1997; EP-113306.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN Bates G, Lehrach H, Scherzinger E, Wanker E; WPI; 99-153775/13.
                                 Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Composition containing fusion protein that includes amyloidogenic peptide - able to self-assemble into fibrils or aggregates, used detect and monitor neuronal diseases, and also to screen for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      therapeutic inhibitors
Disclosure; Fig 8; 62pp; English.
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; I
2.72e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10;
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RESULT
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31-JUL-1998; E04810.
01-AUG-1997; EP-113320.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
Bates G, Lehrach H, Scherzinger E, Wanker E;
WPI; 99-153955/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAY 1999 (first entry)
GST-HD fusion protein GST-HD51DELPBio.
GST-HD fusion protein GST-HD51DELPBio.
Amyloid-like fibril; protein aggregate; inhibitor; inclusion body;
polyglutamine expansion; Huntington's disease; Alzheimer's disease; HD;
polyglutamine expansion; buibar muscular atrophy; type II diabetes;
Parkinson's disease; spinal; buibar muscular atrophy; type II diabetes;
systemic amyloidosis; spinocerebellar ataxia; kuru; familial insomnia;
bovine spongiform encephalopathy; kuru; scrapie; GST-HD; fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W95075;
                                                       Detecting amyloid-like fibrils or protein aggregates insoluble in detergent or urea - from their retention on a filter, used for diagnosis, particularly of diseases associated with polyglutamine
                                                                                                                                                          11-FEB-1999.
31-JUL-1998; E04810.
01-AUG-1997; EP-113320.
(PLAC ) MAX PLANCK GES FOERDERUNG Bates G, Lehrach H, Scherzinger E, WPI; 99-153955/13.
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The invention relates to the detection of amyloid-like fibrils or protein aggregates, insoluble in detergents or urea. The method comprises: (a)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting amyloid-like fibrils or protein aggregates insoluble in detergent or urea - from their retention on a filter, used for diagnosis, particularly of diseases associated with polyglutamine
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   Disclosure;
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Similarity 34.2%;
13; Conservative
   Fig 8; 56pp;
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   English
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15; N
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Pred. No. 2.72e+00
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                                                                                                                                                                                              WISSENSCHAFTEN
, Wanker E;
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Best Local Similarity
Thes 13; Conser
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transformed with a vector containing the nucleic acid encoding the fusion protein are used for the recombinant expression of the fusion protein. The composition is used to detect onset and progression of diseases associated with fibrils/protein aggregates. It is potentially useful for treatment of such diseases (e.g. Alzheimer's disease, scrapie or CAGrepeat expansion conditions such as Huntington's disease (HD), spinal and bulbar muscular atrophy, dentatorubral pallidoluysian atrophy, spinal and spinocerebellar ataxia, Creutzfeld-Jakob disease). Assay methods based on release of the amyloidogenic polypeptide from fusion protein have a precise starting time for aggregate formation, allowing kinetic measurements, and use of an enzyme for cleavage allows testing under
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20-MAY-1999
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GST-HD fusion protein GST-HDSIDELPBio.
Fusion protein; amyloidogenic polypeptide; amyloid-like fibril; scrapie;
Fusion protein; amyloidogenic polypeptide; amyloid-like fibril; scrapie;
protein aggregate; Alzheimer's disease; CAG-repeat expansion; spinal;
Huntington's disease; bulbar muscular atrophy; spinocerebellar ataxia;
dentatorubral pallidoluysian atrophy; Creutzfeld-Jakob disease; enzyme;
                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 8: 62pp; English
The invention relates to a composition comprising a fusion protein of (poly)peptide that increases solubility and/or prevents aggregation of fusion protein, and (ii) amyloidogenic (poly)peptide that can self-assemble into amyloid-like fibrils or protein aggregates. Host cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Composition containing fusion protein that includes amyloidogenic peptide - able to self-assemble into fibrils or aggregates, used detect and monitor neuronal diseases, and also to screen for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-1999.
31-JUL-1998: E04811.
01-AUG-1997: EP-113306.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
PATES G, Lehrach H, Scherzinger E, Wanker E;
WPI: 99-153775/13.
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W95080 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    therapeutic inhibitors
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llarity 34.2%;
Conservative
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2.72e+00;
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DPQRRYEECQQECRQQEERQQPQCQQRCLKRFEQEQQQ 

119

Query Match

h 27.2%; Similarity 34.2%; 13; Conservative

Score 87; DB 1; I Pred. No. 2.72e+00; 15; Mismatches 10

Length 108

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Gaps

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Best Local
                       Huntington's, Alzheimer's or Parkinson's diseases; spinal and bulbar muscular atrophy; spinocerebellar ataxia; systemic amyloidosis; type II diabetes; bovine spongiform encephalopathy; kuru; familial insomnia; scrapie. The protein aggregates can now be detected simply, routinely and rapidly, without requiring sophisticated equipment. The method can be made quantitative, by analysing a series of dilutions, and can be automated to allow many samples to be analysed on the same filter. The prosent sequence represents the Huntington's gene exon 1 translation product which is connected to a GST protein to form a fusion protein. The sequence of the GST protein is not indicated.
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31-JUL-1998; E04810.
01-AUG-1997; EP-113320.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
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                                                                                                                                                                                                                                                                                                                                                   method also helps to identify inhibitors of protein aggregates formation. The method is particularly used to detect protein aggregates that are indicative of disease, for assessing onset or progression of the diseases. The inhibitors identified are potential therapeutic agents for treating the diseases. Other applications include detection of inclusion bodies in bacteria and to study kinetics of aggregate formation. Diseases associated with polyglutamine expansion are particularly diagnosed, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1999 (first entry)
Amino acid sequence of Huntington's gene exon 1 in GST-HD fusion prote
Amyloid-like fibril; protein aggregate; inhibitor; inclusion body;
polyglutamine expansion; Huntington's disease; Alzheimer's disease;
parkinson's disease; spinal; bulbar muscular atrophy; type II diabetes
systemic amyloidosis; spinocerebellar ataxia; kuru, familial insomnia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       physiological conditions. proteins. Sequence 94 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aggregates, insoluble in detergents or urea. The method comprises: (a) applying material suspected of containing protein aggregates to a filter; and (b) detecting retention of protein aggregates on the filter. This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to the detection of amyloid-like aggregates, insoluble in detergents or urea. The metho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosis, particularly of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detecting amyloid-like fibrils or protein aggregates insoluble detergent or urea - from their retention on a filter, used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bates G, Lehrach 1
WPI; 99-153955/13
   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Fig 2; 56pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bovine spongiform encephalopathy; kuru;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
13; Conser
      108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27.2%;
ilarity 34.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "GST protein 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "polyglutamine expansion that can comprise
    upto 51 glutamines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein; 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ‡odu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequences W95077-80 represent GST-HD fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 87;
Pred. No.
15; Mismai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; I
2.72e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      scrapie;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polyglutamine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-terminal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fibrils or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                        Diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein
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                                                                                                                                                                          Query Match 27.2%;
Best Local Similarity 34.2%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a composition comprising a fusion protein of (i) (poly)peptide that increases solubility and/or prevents aggregation of fusion protein, and (ii) amyloidogenic (poly)peptide that can self-assemble into amyloid-like fibrils or protein aggregates. Host cells transformed with a vector containing the nucleic acid encoding the fusion protein are used for the recombinant expression of the fusion protein. The composition is used to detect onset and progression of diseases associated with fibrils/protein aggregates. It is potentially useful for treatment of such diseases (e.g. Alzheimer's disease, scrapie or CAGrepeat expansion conditions such as Huntington's disease (HD), spinal and bulbar muscular atrophy, dentatorubral pallidoluysian atrophy, spinal and spinocerebellar attaxia, Creutzfeld-Jakob disease). Assay methods based on release of the amyloidogenic polypeptide from fusion protein have a precise starting time for aggregate formation, allowing kinetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W95076 standard; Protein; 108 AA.
W95076;
W95076;
20-MAY-1999 (first entry)
Amino acid sequence of Huntington's gene exon 1 in GST-HD fusion protein.
Fusion protein; amyloidogenic polypeptide; amyloid-like fibril; scrapie;
protein aggregate; Alzheimer's disease; CAG-repeat expansion; spinal;
Huntington's disease; bulbar muscular atrophy; spinocerebellar ataxia;
dentatorubral pallidoluysian atrophy; Creutzfeld-Jakob disease; enzyme;
GST-HD; HD.
                                                                                                                                                                                                                                                              measurements, and use of an enzyme for cleavage allows testing under physiological conditions. The present sequence represents the Huntington's gene exon I translation product which is connected to a GST protein to form a fusion protein. The sequence of the GST protein is not indicated.

Sequence 108 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Composition containing fusion protein that includes amyloidogenic peptide - able to self-assemble into fibrils or aggregates, used to detect and monitor neuronal diseases, and also to screen for therapeutic inhibitors

Example 1; Fig 2; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO996545-A2.
11-FEB-1999; E04811.
31-JUL-1998; E04811.
01-AUG-1997; EP-113306.
(PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
Bates G. Lehrach H, Scherzinger E, Wanker E;
WPI; 99-153775/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "GST protein connected to the N-terminal" Misc_difference 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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                                                                                     82 DPQRRYEECQQECRQQEERQQPQCQQRCLKRFEQEQQQ 119
                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "polyglutamine expansion that can comprise
    upto 51 glutamines"
                                                                                                                                                                        Score 87; DB 1; L
Pred. No. 2.72e+00;
15; Mismatches 10
                                                                                                                                                                             10;
                                                                                                                                                                                                                   Length 108;
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